NO CODE ANALYSIS

TEAM – 6

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PROBLEM STATEMENT

The most appealing reason is that one simple graph says more than twenty pages of prose. These graphs laid foundation for the growth of Data analysis - an auspicious branch of computer science. Data analysis for business, finds its significant place in the wide umbrella of its applications.

It provides actionable insights into customer behavior along with comprehensive market analysis thereby providing a competitive edge to businesses. Data analysis involves the processes of Defining the Question, Collecting the data,

Cleaning the data, Visualizing the data, Analyzing the data, Sharing your results, Embracing failure,Summary. Currently these processes are being carried out manually, tools automating any of these processes would come in handy.

OBJECTIVE

- The project's goal is to create a data cleaning and visualization tool to smooth data analysis process. This project primarily concentrates different data visualisation techniques.

- This application when completely constructed will be able to automate data cleaning and data visualisation. It will be making data analysis simpler. Inferences about the data can also be collected from this framework.

PROPOSED SOLUTION

A web-based application that collects sales data, cleans it, and analyses it to assist managers gain insight into business operations in order to make better decisions and achieve better outcomes. It enables them to manage, process, and simplify enormous datasets in real time, while also improving their ability to make data-driven decisions.

PROJECT PHASES

- Collecting the data
- Cleaning the data
- Visualizing the data
- Analyzing the data
- Sharing your results

DATA VISUALIZATION

- In our increasingly data-driven world, it’s more important than ever to have accessible ways to view and understand data. That’s where data visualization comes in handy.

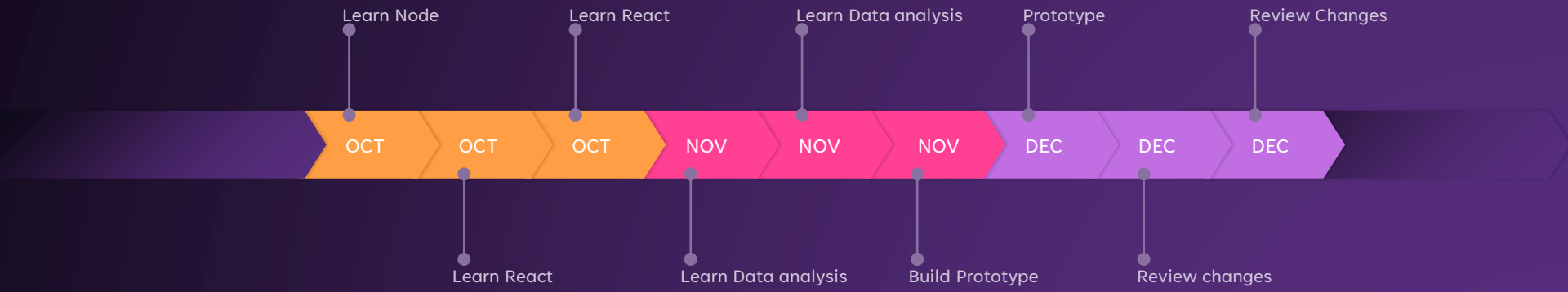
- With the goal of making data more accessible and understandable, data visualization in the form of dashboards is the go-to tool for many businesses to analyze and share information.

Literature Survey

By fusing data sources, Microsoft Power BI gives customers access to a business intelligence dashboard. It may connect to only an Excel spreadsheet or link data warehouses that are cloud- and on-premises-based. The information retrieved from cloud-based resources, such Salesforce CRM, is instantly updated.

Literature Survey

TIMELINE


Learn Node
Learn React
Learn Data analysis
Prototype
Review Changes
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Learn React
Learn Data analysis
Build Prototype
Review changes

METHODOLOGY

DATA TRANSFORMATION

The selected dataset includes information that may or may not be helpful to us. Data pre-processing is the process of identifying the most important data from the whole dataset for subsequent processing. Hence, the unwanted part of the data is removed. As a result, processed data is ready to train the machine.

FRONT-END API

It is the interface between the front-end application and the data visualization and machine learning model. It fetches the input provided by the user in the front end and throws it to visualization pipeline that works behind the scene to provide visual data, then carries out data analytics

BACK-END

The background operations are carried out in JavaScript which manages file upload, delete, visualizing and other user functions, assisted by Python for carrying out Data Analytics on the dataset.

METHODOLOGY

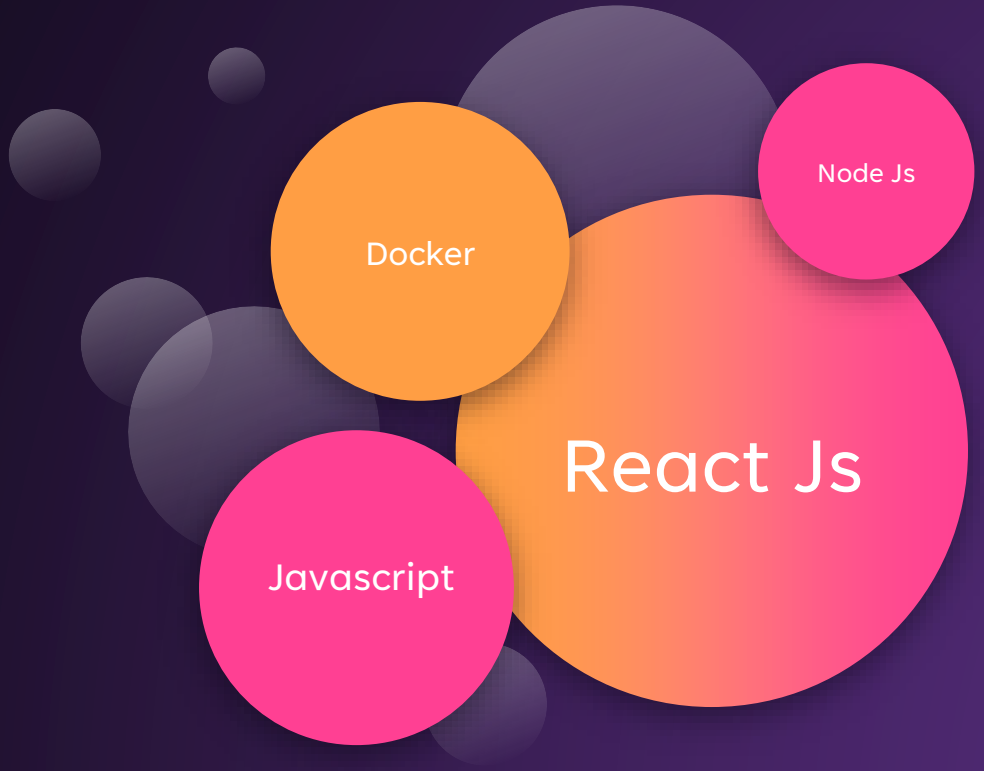
SERVER-SIDE SCRIPTING

The software also utilizes the power of the server to provide quick results on training and Data Analytics and Machine Learning are carried out in the server to reduce the pressure on client-side resources, Delivering faster and efficient trained models within a short span of time regardless of the client's resources.

DOCKERIZED ENVIRONMENT

It depends on various libraries of different versions for functioning, it is dockerized to provide easy to deploy and use functionality to clients. It also allows users to run parallel instances training multiple models parallelly.

STACKS USED



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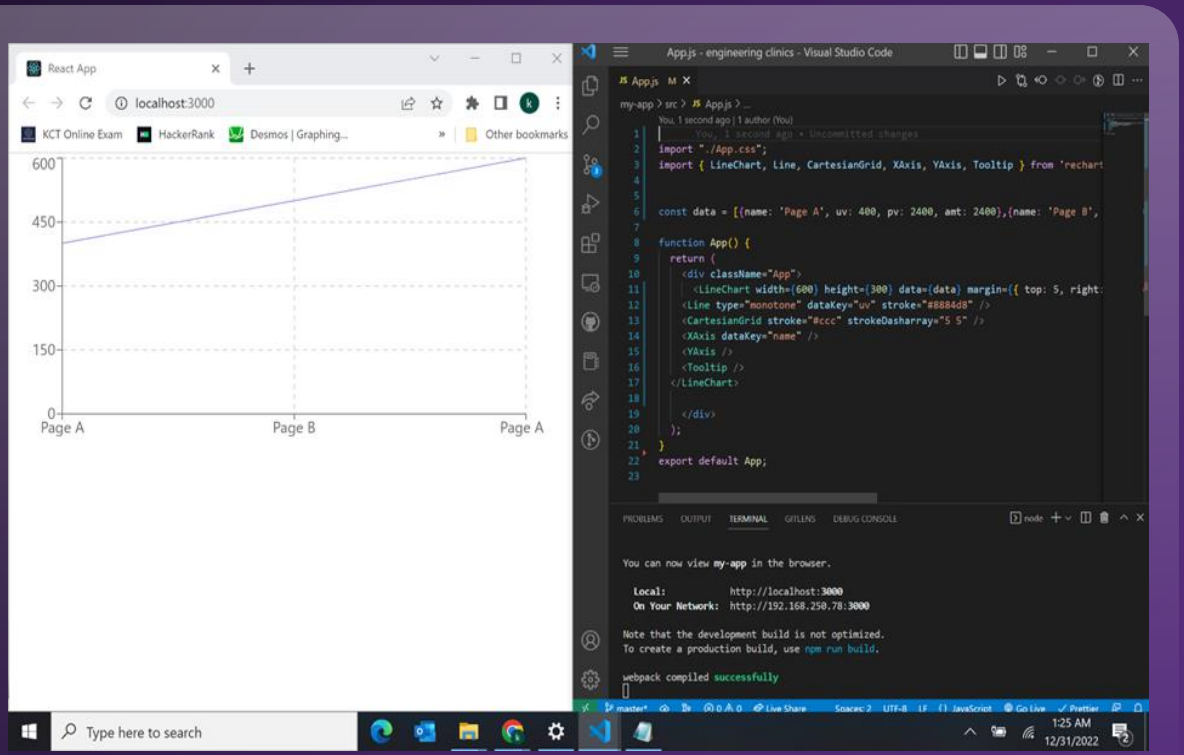

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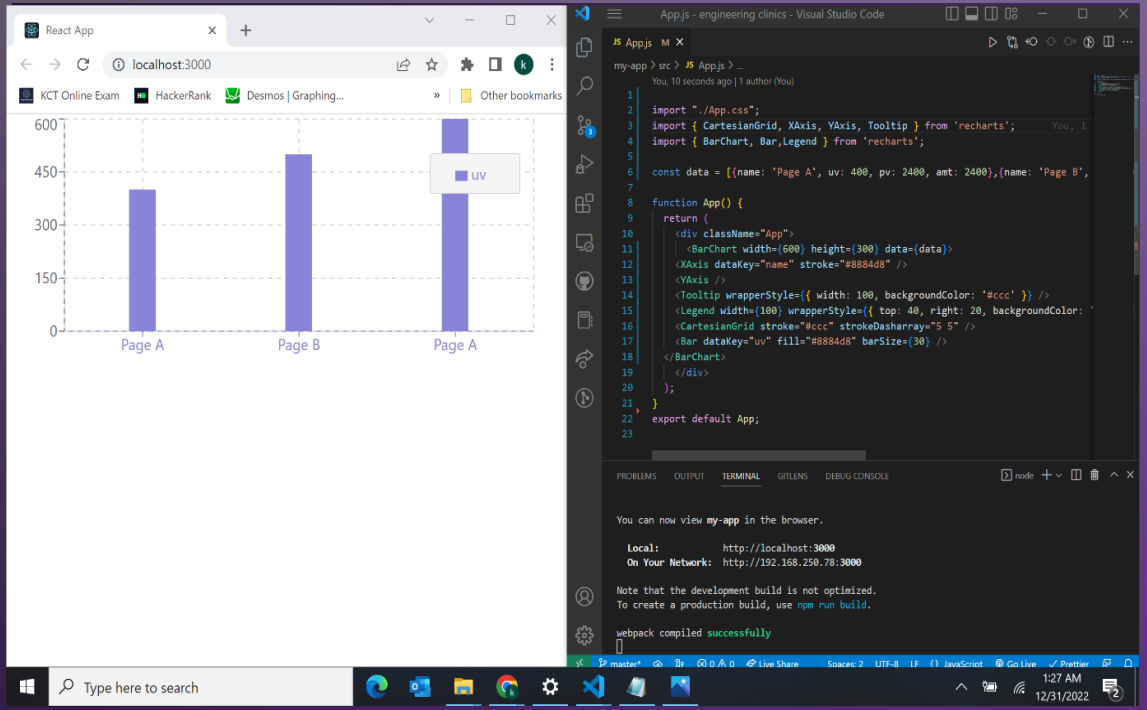

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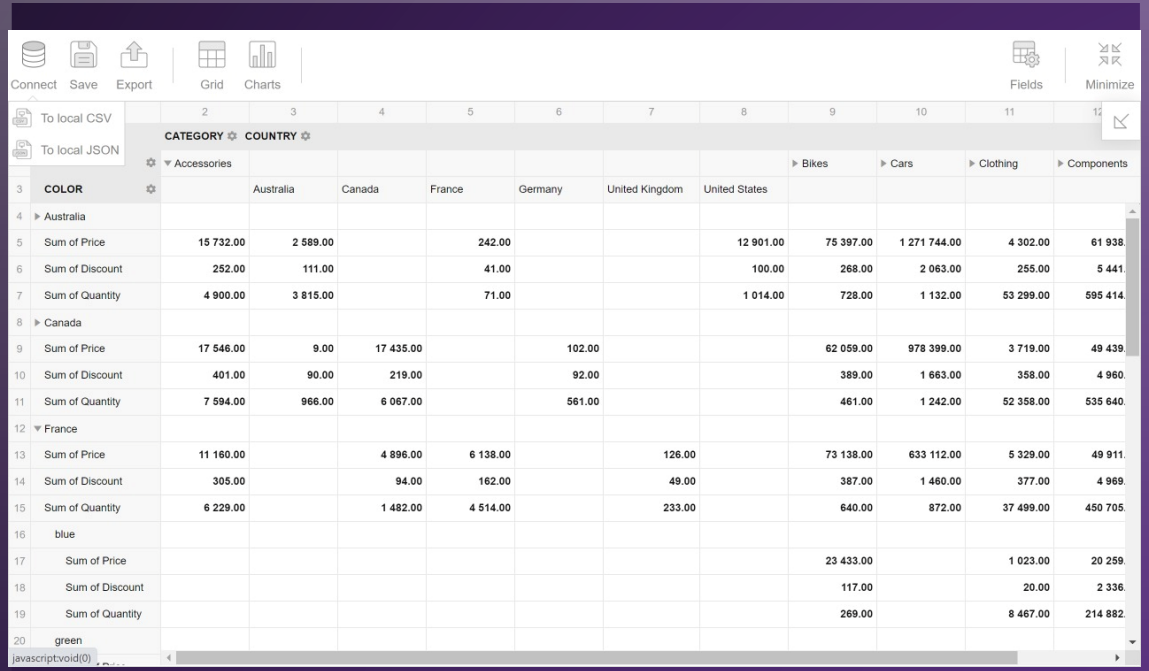

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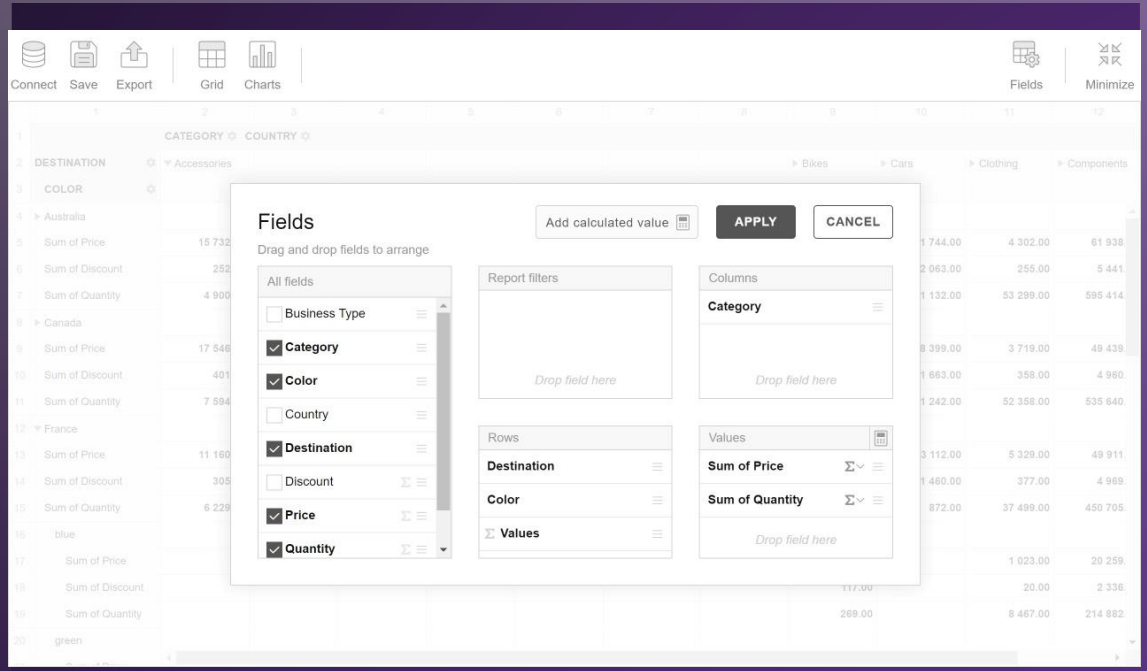

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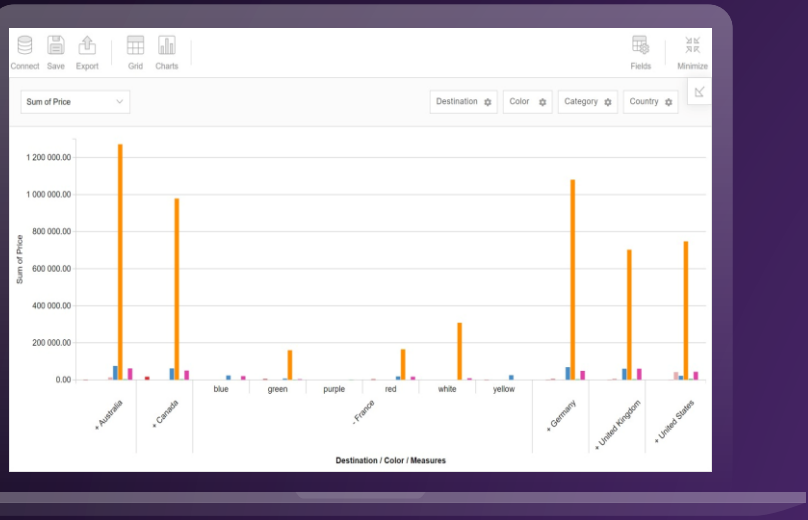

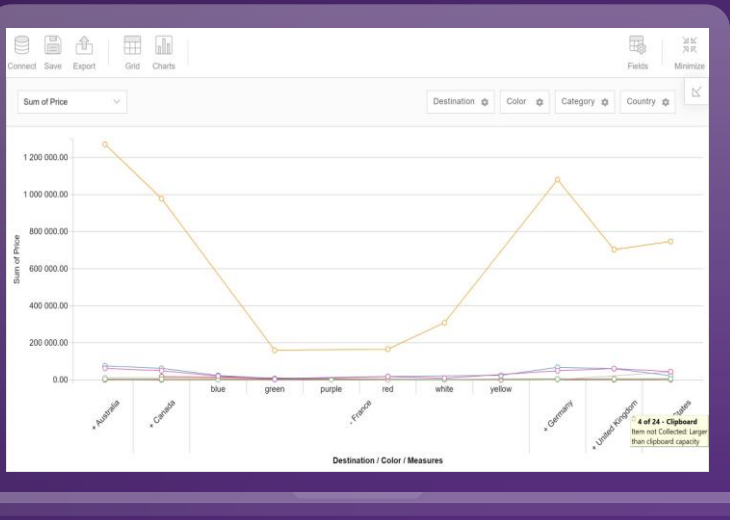

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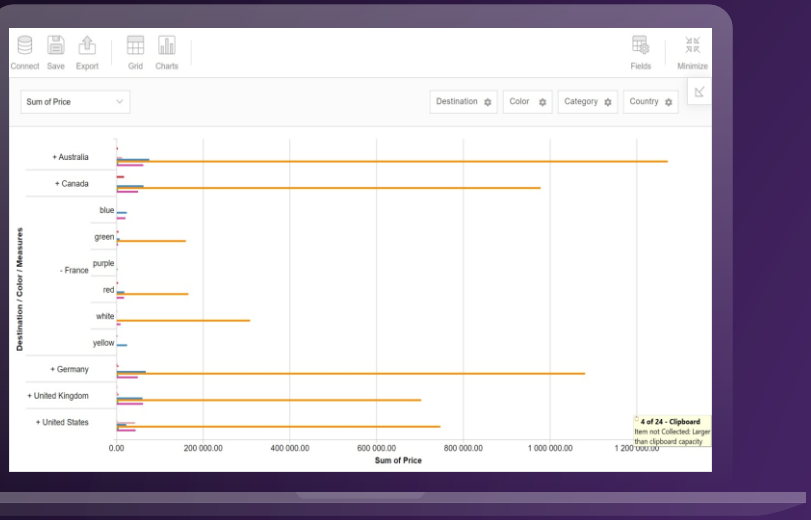
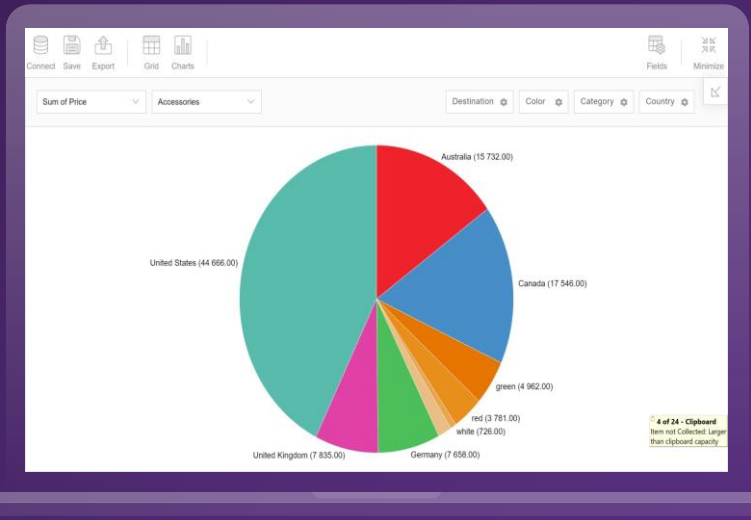
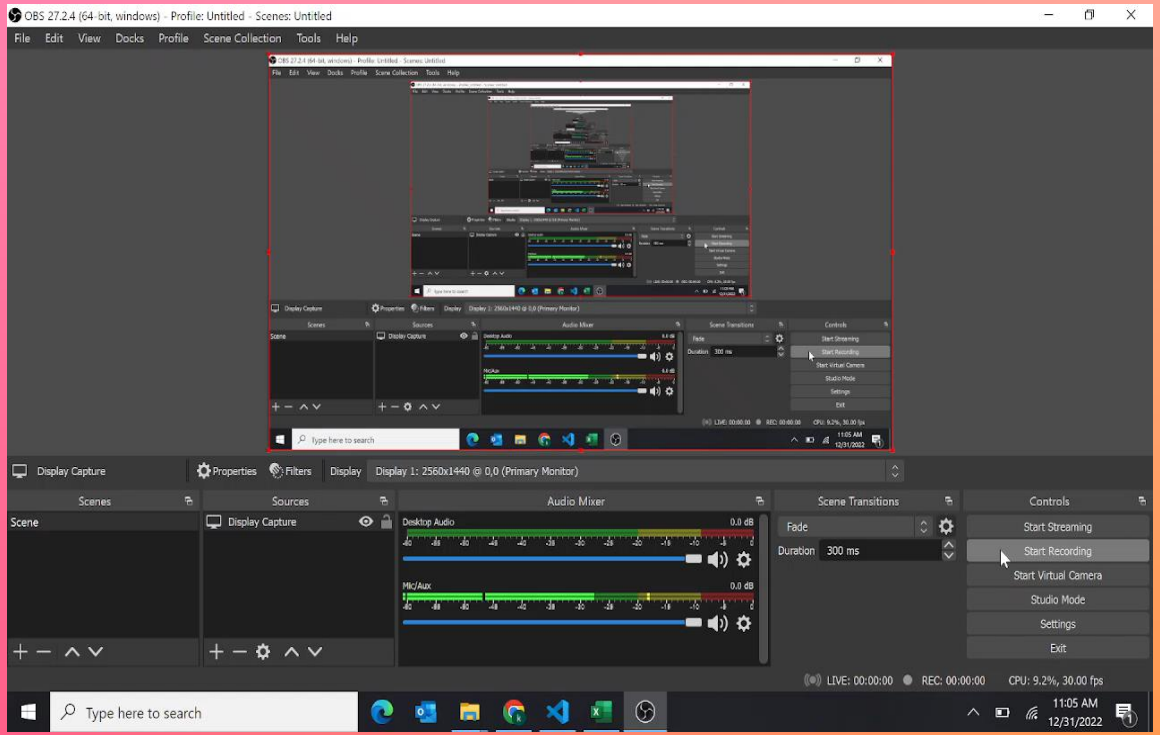




PROJECT DEMO VIDEO



CONCLUSION

The expansion of businesses occurs at an exponential rate. Data analysis is essential for the promotion of such small firms. This approach of data visualization is easier and simpler than sifting through the entire program's working code since it makes use of the user's privileges. Because it is necessary to download programmed from unauthorized and dubious third-party websites, average people lose their personal information and begin to question the system. Users can quickly and easily obtain accurate statistics and data visualization using this strategy. This technique is also applicable to other situations where a significant volume of sensitive data needs to be analyzed.

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Thank you !!